

City of Newport Beach and YOU

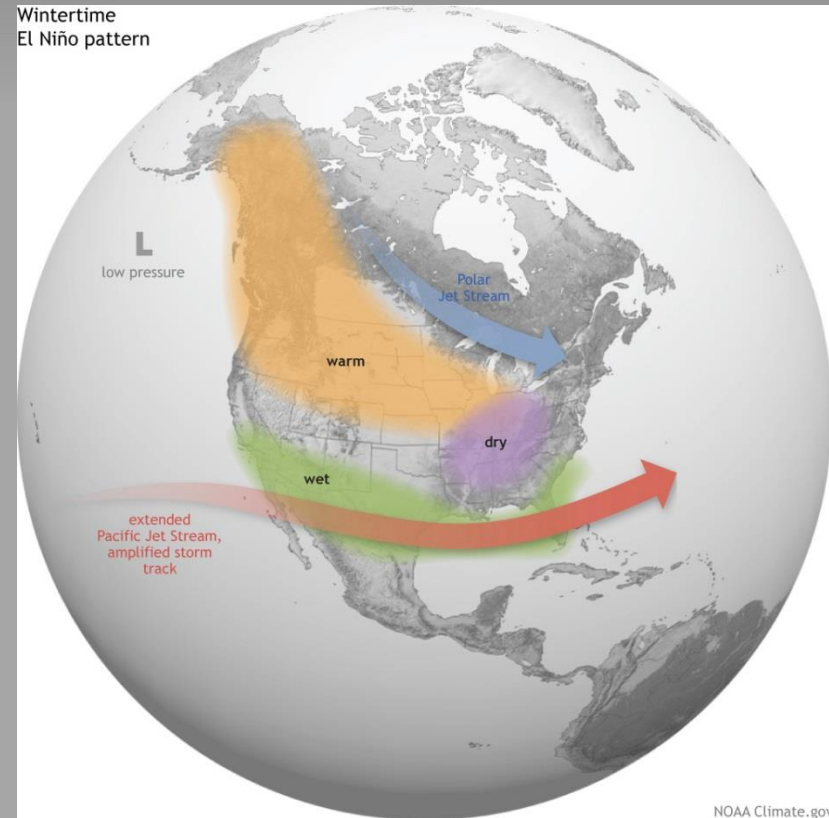
Preparing for
a Possible
“EL NIÑO”
Winter Storm
Season
Together



October 13, 2015 – City Council Study Session

What is El Niño

- A warming of the ocean surface or above average sea surface temperatures in the tropical Pacific Ocean PLUS “easterly winds” weaken or turn “westerly” (*start blowing from west to east*)
- El Niño conditions are now present.
- A greater than **95% chance** that El Niño will continue through winter 2015-16
- About **85% chance** it will last into early spring 2016.
- Increased probability that the U.S. will have weather and climate impacts.



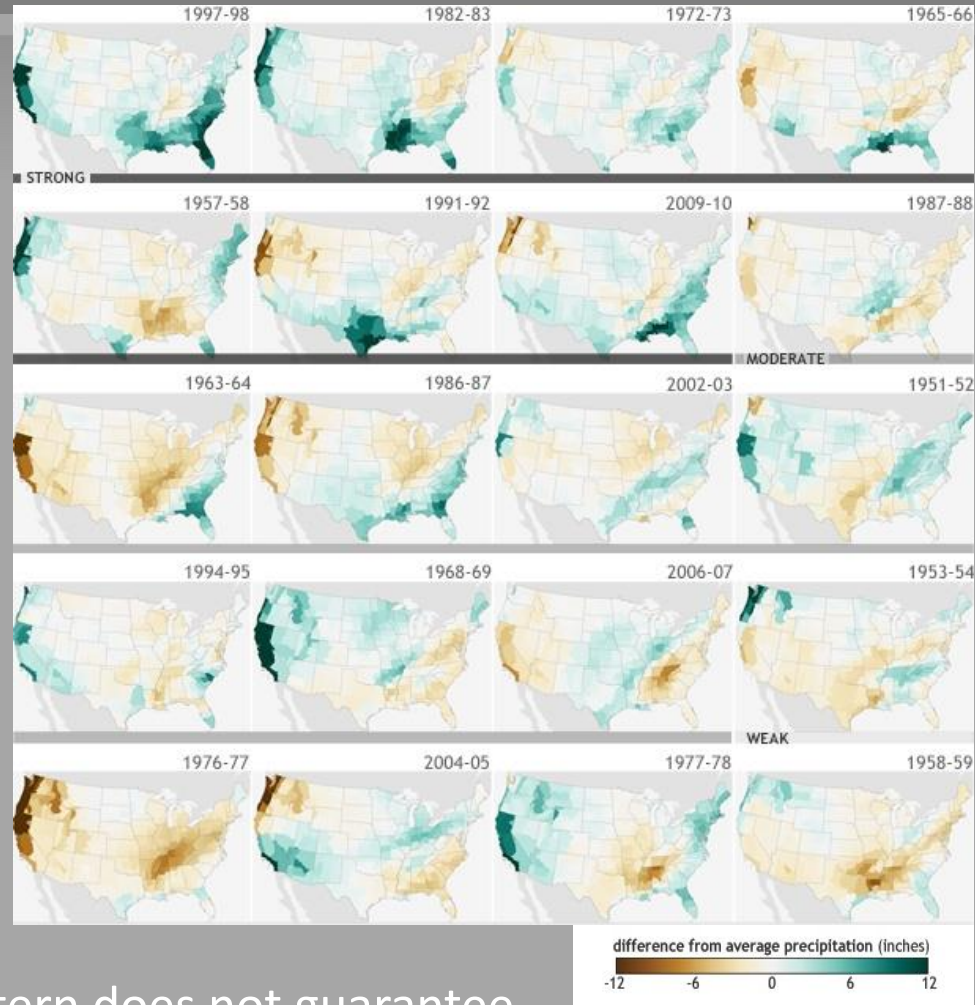
A Look Back on Prior El Niños

Winter precipitation patterns during Strong, Moderate & Weak El Niño events since 1950

Southern California Rainfall

Los Angeles Almanac 1877-2015

| Year | ENSO (strength) | Rainfall (inches) |
|---------|-----------------|-------------------|
| Average | N/A | 14.81 |
| 2013-14 | N/A | 6.08 |
| 2009-10 | Strong | 16.36 |
| 2004-05 | Weak | 37.96 |
| 1997-98 | Strong | 31.01 |
| 1982-83 | Strong | 31.28 |
| 1977-78 | Weak | 33.44 |
| 1968-69 | Moderate | 27.47 |



Important Note - A Strong El Niño pattern does not guarantee local rainfall will be substantially above normal.

Please continue to Conserve Water!

Major Concerns

RAIN + HIGH TIDE LEVELS + Wind/STORM SURGE =
INCREASED FLOOD RISK



Upcoming High Tide Dates to Watch If Accompanied by Rain:

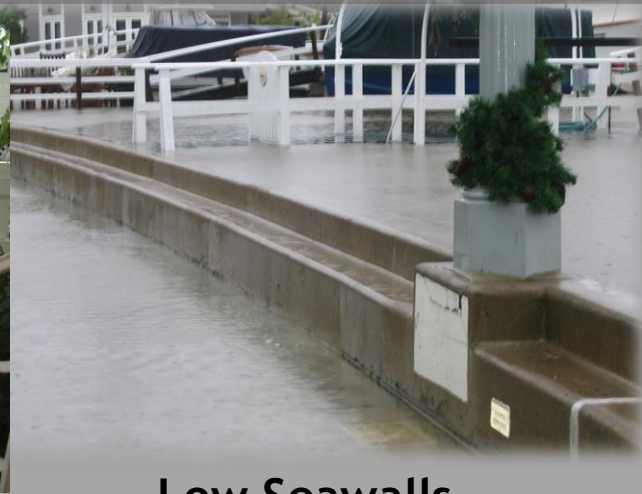
| <u>Dates</u> | <u>Est. Tide Levels*</u> |
|--------------|--------------------------|
| Oct 25 - 31 | 7.2' - 7.9' |
| Nov 11 - 12 | 7.0' |
| Nov 22 - 29 | 7.0' - 8.0' |
| Dec 8 - 14 | 7.0' - 7.2' |
| Dec 21 - 28 | 7.1' - 7.8' |
| Jan 6 - 12 | 7.0' - 7.4' |
| Jan 19 - 25 | 7.1' - 7.4' |
| Feb 5 - 10 | 7.0' - 7.3' |
| Mar 7 - 8 | 7.0' |

** Adjusted for local conditions*

Common Types of Concerns



Street/Property Flooding



Low Seawalls

Gaps and Overtopping ~ Heavy Rain with Closed Tide Valves



Common Types of Concerns

~ Wind and
Rain Issues



~ Debris
and Sand
Cleanup



~ Falling Trees & Branches

~ Interruption to Power

~ Slope Issues



What is the City Doing to Prepare for Storms?

Municipal Operations

- Inspected and cleaned 3.2 miles of storm pipelines and channels.
- Inspected and cleaned over 3,250 catch basins/ storm drains; 30 storm drain structures; 16,500 feet of open v-ditches; 18 CDS units, 435 inlet guards; and 38 portable MOD pumps.
- Purchased additional water pumps.
- Sealed areas of leaking public seawalls and bulkheads.
- Inspected and maintained all 87 tidal valves.



What is the City Doing to Prepare for Storms?

Municipal Operations

- Completed pre-storm season pruning of 1,800 palm trees throughout the City.
- Trained City staff on safe chainsaw use.
- Ordered additional sandbags for City use and community distribution.
- Tarped and sandbagged sensitive public slopes.
- Prepared to create sand berms at select beaches if conditions require them.



What is the City Doing to Prepare for Storms?

Public Works

- Aggressive **Capital Improvement Program** over past many years to address aging Storm Drains, Seawalls, Ocean Piers, Tide Valves, and more to improve City's critical support infrastructure.
- Pressing to complete and secure active **public project sites** and ensure they are ready for storm season.
- Performing **private construction site** inspections to ensure required erosion control and pollution prevention measures are in place.



What is the City Doing to Prepare for Storms?

Public Works

- Inspecting/maintaining **traffic control** systems, traffic signals, and hanging traffic signs.
- Contacting **mooring permittee's** and requesting they check/reinforce/replace aging anchoring systems.
- Working to complete several **roof repair** projects on City facilities.
- Reviewing/addressing various **harbor beaches**.
- Meeting with **outside agencies** like Caltrans requesting them to inspect their facilities and address concerns now.
- Advising **HOAs** to ready private properties for winter.



City's Response

Preceding a Storm – Multiple Departments

- Monitor weather forecasts.
- Provide empty sandbags for public use (check website for locations).
- Schedule or verify availability of necessary staff.
- Review emergency operations and procedures with employees and conduct practice drills.
- Increase public awareness and provide resources on City's website and social media.
- Educate and prepare community volunteers through CERT.



City's Response

During a Storm

- Monitor traffic and signalized intersections through live camera feeds.
- Coordinate efforts with utilities and other public agencies.
- Respond to and address issues and problems.
- Direct response to life-threatening situations as priority one.
- Call in staff & volunteers (force multipliers).
- Provide updates to the public through City's website, social media and by phone.



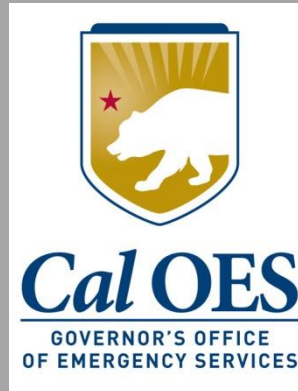
City's Response

During a Storm

- Activate Emergency Department Operations Centers (DOCs) and Emergency Operations Center (EOC) if necessary.
- Proclaim local emergency for State and Federal assistance and reimbursement (OES, FEMA).
- Maintain records.



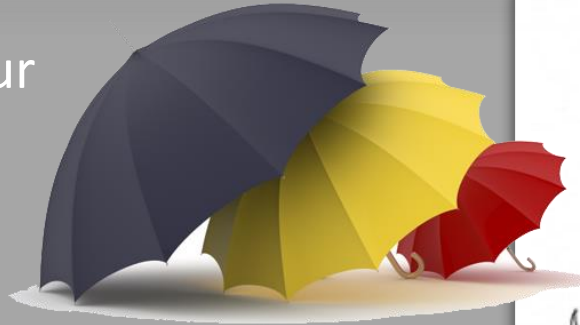
FEMA



So What YOU Can Do to Prepare for Winter Storms

Pre-Season Preparation

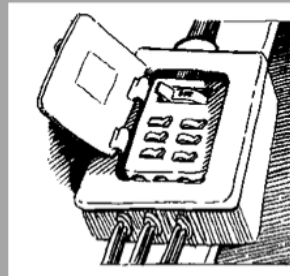
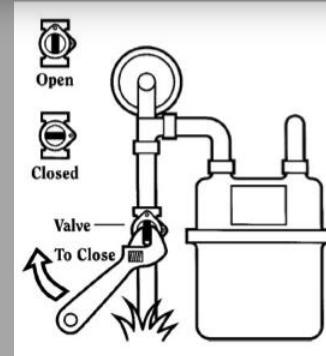
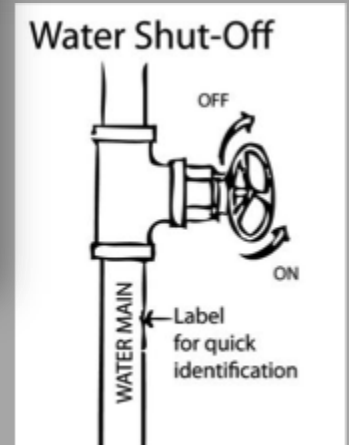
- Assess storm/flood risk for your property.
- Purchase empty or pre-filled sandbags.
- Update family plans and emergency preparedness kits.
- Review, update or purchase flood insurance policies.
- Sign up with Nixle, AlertOC, and City's Facebook, Twitter, eNews.



What YOU Can Do to Prepare for Winter Storms

Pre-Season Preparation

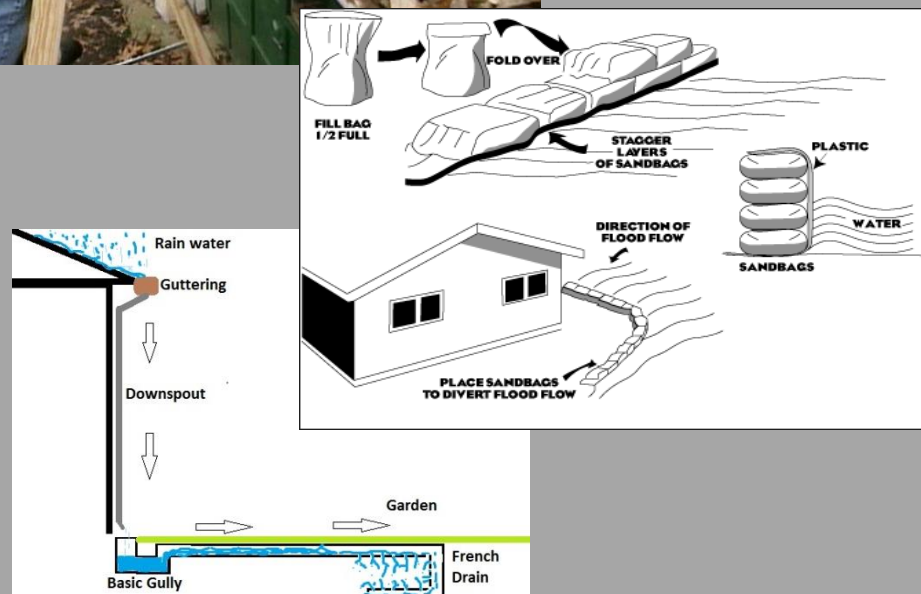
- Know where your utility shutoffs are.
- Schedule home repairs now (roofs, doors, windows).
- Trim trees and remove excess growth.
- Clean gutters and align downspouts.
- Install surge protectors on sensitive electrical equipment.



Direct Water Where to Flow

When a storm is forecasted, but before the wind and rain comes...

- Inspect your property and maintain your drainage systems.
- Secure or remove items that can blow around.
- Install sandbags to create temporary barriers as needed.
- Make arrangements to shelter family, especially children, elderly persons, persons with disabilities, and pets.
- Call (949) 644-3055 if you notice a blocked street drain or culvert.



During the Storm

What to do during storms or flooding

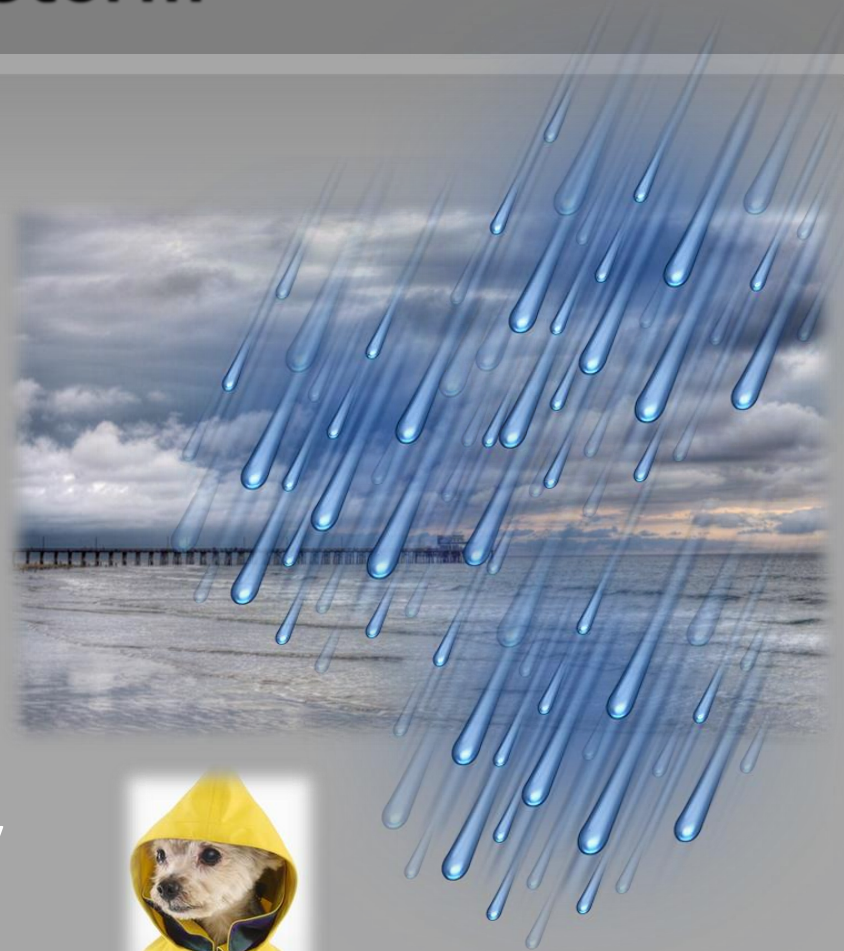
- Avoid areas subject to flooding.
- Use 911 for emergencies only.
- Respect barricade signs and authorities.
- Do not drive over flooded roads.
- Keep your distance from downed power lines.



During the Storm

What to do during storms or flooding

- Listen/watch for flood reports and instructions.
- Evacuate immediately if told to do so by authorities.
- Turn off utilities at main switches or valves if instructed to do so.
- Check in and look after children, elderly persons, persons with disabilities, and pets.



City of Newport Beach

www.newportbeachca.gov/el_nino

